UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,530	03/14/2001	James Riordan	CH920000013US1	3810

7590 04/26/2005	EXAMINER
Louis P. Herzberg	KLIMACH, PAULA W
Intellectual Property Law Dept.	

ART UNIT	PAPER NUMBER
2135	

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DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/808,530	RIORDAN, JAMES
	Examiner	Art Unit	
	Paula W Klimach	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or·extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _14 April 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-16_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _15 and 16_ is/are allowed.

6)☒ Claim(s) _1-14_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 4/14/05. Original application contained Claims 1-13. Applicant added Claim 14, and amended Claims 1 and 10. The amendment filed on 4/14/05 have been entered and made of record. Therefore, presently pending claims are 1-16.

Response to Arguments

Applicant's arguments filed 12/08/04 have been fully considered but they are not persuasive because of following reasons.

Applicant argued that neither of the references addresses the problem of preventing a password from being improperly obtained. This is not found persuasive. Guski et al. Discloses a system for authenticating a user using password PW and preventing a password to be improperly obtained by using key k (column 9 lines 22-30).

The applicant also argued that neither of these references discloses or suggests the unique use of the generator module of the present invention-that is the use of the generator module, as part of the computer's operating system. This is not found persuasive. As shown in fig. 3 The password generator 312 is a part of the node 104, and therefore, the password generator is a module/layer or part of the operating system of node 104.

In reference to generator module, the applicant argues that the generator module of the present invention is in series between a user and a program to the program. This is not found

persuasive because the applicant does not claim the generator module being <u>in series between a</u> <u>user and a program</u>.

In further reference to the generator module, the applicant argues that it is used to encrypt the user program and to pass the encrypted password to the program. The applicant argues further "the independent claims 1 and 10 describe the above –discussed feature of the invention." The above-discussed feature includes the generator module used to encrypt the user program and to pass the encrypted password to the program. This is not persuasive because the above-discussed feature is not claimed in either claim 1 or claim 10.

The applicants remarks indicate that there exists a claim 17, where claim 16 is an independent claim. However the listed claims are 1-16 where claim 15 is the independent claim and claim 16 is dependent on claim 15.

The examiner asserts that Guski and Abdi do teach or suggest the subject matter broadly recited in independent Claims 1-14. Dependent Claims 2-9 and 1-14 are also rejected at least by virtue of their dependency on independent claims and by other reason set forth in this office action. Accordingly, rejections for claims 1-14 are respectfully maintained.

Claim Rejections - 35 USC § 103

Claims 1, 6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guski et al (5,592,553) in view of Abadi et al (6,141,760).

In reference to claims 1 and 8-10, Guski discloses a system and method for generating a one-time password that changes pseudorandomly with each request for authentication. The method includes the password generator, 104 (the generator module of the operating system)

receiving a program-specific identifier (H(E)) from said program (E) and receiving a password

PW (310). The program specific identifier disclosed by Guski is the host application identifier

(column 7 lines 28-32). Guski further discloses sending said program-password-specific

identifier (F(H(E),p)) to said program (E), said program-password-specific identifier (F(H(E),p))

being processable by said program (E). The password (214) generated at the Security server

(208) is sent to the client (202) where it is processed by creating the signon request (216) using

specific ID.

Guski does not expressly disclose receiving said password (p); generating from at least

said program-specific identifier (H(E)) and said received password (p) a program-password-

specific identifier (F(H(E),p)).

However Abadi discloses creating passwords for password controlled access points

(abstract). The method includes the user sending a master password (column 2 lines 64-65). The

system disclosed by Abadi generates the passwords using a hard to invert function F to combine

the user name, service name, and master password (column 3 lines 26-33).

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to send a password from the client to the server of Guski to create the password as

disclosed by Abadi. One of ordinary skill in the art would have been motivated to do this

because users have to remember a large number of different passwords and creating passwords

using a computerized method would reduce the number of passwords a user must remember and

create more random, and therefore secure, passwords.

In reference to claim 6, Guski does not discloses a system wherein the program-

password-specific identifier (F(H(E),p,s)) is generated from the program-specific identifier

(H(E)), the received password (p), and an additional value (s), said additional value (s)

characterizing a device (2) where the program-password-specific identifier (F(H(E),p,s)) is

generated.

However Abadi discloses a system wherein the program-password-specific identifier

(F(H(E),p,s)) is generated from the program-specific identifier (H(E)), the received password (p),

and an additional value (s), said additional value (s) characterizing a device (2) where the

program-password-specific identifier (F(H(E), p ,s)) is generated (Fig. 2). The additional value

is the user name. The user name is characterizes the device because the device is used or owned

by the user.

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to send a password from the client to the server of Guski to create the password as

disclosed by Abadi. One of ordinary skill in the art would have been motivated to do this

because users have to remember a large number of different passwords and creating passwords

using a computerized method would reduce the number of passwords a user must remember and

create more random, and therefore secure, passwords.

Claim 2, 7, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Guski and Abadi as applied to claim 1 above, and further in view of Schneier.

In reference to claims 2, 11, and 14, Guski and Abadi do not disclose the program

specific identifier derived by applying a first cryptographic function preferably a one-way hash

function. Although Abadi discloses the second cryptographic function being a hard to invert

function, where a one-way hash function is a hard to invert function, neither Guski not Abadi

expressly disclose the second function being a one-way hash function, such as MD5 or SHA-1.

Schneier discloses the MD5 and SHA as hash functions that are used to create a hash

value such that it is hard to find another pre-image message that produces the same hash value

(page 429 paragraph 2); and therefore performs the function of H(E) of creating an identifier.

Schneier further discloses the on-way hash function used to for security because the hash value is

easy to compute, but difficult to reverse (page 429 paragraph 2).

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to use the hash functions as disclosed by Schneier to create the identifier and a

secure password in the system of Guski. One of ordinary skill in the art would have been

motivated to do this because hash function prevent the substitution of a different pre-image

message for the original pre-image message by providing a "fingerprint" of the pre-image.

In reference to claim 7, Guski and Abadi doe not disclose a system wherein the program-

password-specific identifier (F(H(E),p)) is used as a key to decrypt another program.

Schneier discloses the use of a pass phrase (password) that is transformed into a random

key by a one-way hash function (page 174 paragraph 2)

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to use the hash functions as disclosed by Schneier to create the identifier and a

secure password in the system of Guski. One of ordinary skill in the art would have been

motivated to do this because hash function prevent the substitution of a different pre-image

message for the original pre-image message by providing a "fingerprint" of the pre-image.

Claims 3-5, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guski and Abadi as applied to claim 1 above, and further in view of Cheng et al.

In reference to claim 3, Guski and Abadi do not disclose a system wherein a password-reading program (26) and the program-specific identifier (H(E)) are provided by means of a trusted computing base (TCB), preferably for both the same trusted computing base (TCB).

Cheng discloses a computer software architecture for distributed systems based on Trusted Computing Base program (Introduction page 216 paragraph 2).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the trusted computing base as in Cheng in the system of Guski. One of ordinary skill in the art would have been motivated to do this because TCB provides confidents that it enforces correctly a system security policy and satisfies some critical assurance criteria.

In reference to claim 4, Guski and Abadi do not disclose a system wherein the password (p) is received at the password-reading program (26), and, while said password-reading program (26) is executed, all I/O devices are locked and other programs are blocked.

Cheng discloses key distribution in a system based on TCB. One of the conditions required is that A and B believe that the key shared between them is secret shared exclusively (Section 4). Locking the I/O and blocking programs when the password is received ensures that only the trusted application A and trusted application B have the password.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the trusted computing base as in Cheng in the system of Guski. One of

ordinary skill in the art would have been motivated to do this because TCB provides confidents that it enforces correctly a system security policy and satisfies some critical assurance criteria.

In reference to claims 5 and 12-13, Guski and Abadi do not disclose a system wherein the fact that the password-reading program (26) is executed based on the trusted computing base (TCB) is indicated via a signal, preferably by illuminating an LED (28), while the password-reading program (26) receives the password (p).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to indicate while the password-reading program receives the password in the system of Guski. One of ordinary skill in the art would have been motivated to do this because indicating will inform the user that a security process is in progress.

Allowable Subject Matter

Claims 15-16 allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
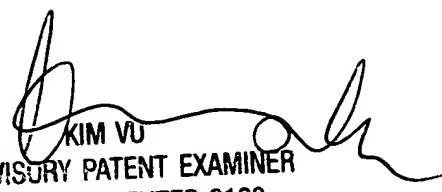
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Paula W Klimach whose telephone number is (571) 272-3854.

The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK
Tuesday, April 19, 2005

KIM VU
SUPERVISORY PATENT EXAMINER
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